

REMARKS

Applicant has carefully reviewed and considered the Office Action and the reference enclosed therewith. Entry of the above noted amendment is respectfully requested. Independent claims 1 and 7 have been amended, and claims 10-19 have been added. No new matter has been added. Claims 1-19 are under consideration, as a result of these amendments.

CLAIM REJECTIONS – 35 U.S.C. §112

Claims 7 and 8 are rejected under 35 U.S.C. §112, ¶2. Claim 7 has been amended for clarification. In view of the amendments above, it is respectfully requested that the rejections under 35 U.S.C. §112, ¶2 be withdrawn.

CLAIM REJECTIONS – 35 U.S.C. §103

Claims 1, 3, 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudeck (U.S. Patent No. 6,461,915) in combination with Chen (U.S. Patent No. 6,200,856).

Claim 1 recites “depositing a second polysilicon film on the entire structure and then planarizing the second polysilicon film so that the oxide film protrusion is exposed, thereby forming a floating gate having the second polysilicon film formed on the first polysilicon film” and “etching a part of the exposed oxide film protrusion to improve a coupling ratio.” Neither Rudeck nor Chen teach or even suggest the recited subject matter. Neither, for example, teaches etching a part of the exposed oxide film protrusion after forming a floating gate having a first and second polysilicon film.

Rudeck may disclose forming a first conducting layer and an HSG layer. But, Rudeck does not teach or even suggest planarizing that HSG layer, or etching a part of the exposed oxide film protrusion after the formation of the HSG layer.

And while Chen may disclose a planarization step, that planarization is of a polysilicon film after the formation of the oxide film protrusion. Whereas, according to the presently claimed subject matter, the oxide film protrusion is formed after the formation of the first polysilicon film. Chen also does not teach or suggest forming a floating gate having

a second polysilicon film formed on the first polysilicon film. Chen merely discloses forming a polysilicon spacer on the sidewall of first polysilicon film.

In short, neither Chen nor Rudeck taken in combination or alone teaches or suggests the recited subject matter of independent claim 1. Claims 1, 3, and 4-9 are in condition for immediate allowance.

Claim 10 recites "removing a predetermined thickness of the exposed oxide film protrusion by a pre-treatment cleaning process." However, neither Rudeck nor Chen teaches or suggests such subject matter. Claims 10-19 are in condition for immediate allowance as well.

Claim 2 is separately rejected under 35 U.S.C. §103(a) as being unpatentable over Rudeck (U.S Patent No. 6,461,915) in combination with Chen (U.S. Patent No. 6,200,856) and Wang et al. (U.S. Patent No. 6,242,303). Claim 2 depends from claim 1, which the applicants have noted above is not taught by Chen or Rudeck. Wang et al. does not teach the recited subject matter either. Therefore, the applicants respectfully assert that claim 2 is in condition for allowance.

In sum, the applicants respectfully assert that the amended claim 1 is in condition for allowance, along with claims 2-9 depending therefrom. Further, applicants respectfully assert that added claim 10 is in condition for allowance, along with claims 11-19 depending therefrom.

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Respectfully submitted,

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